



Satisfaction of the Irish Trauma and Orthopaedic training programme with the Intercollegiate Surgical Curriculum Programme

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Abstract

Background Surgical training has undergone extensive changes in recent years. The Intercollegiate Surgical Curriculum Programme (ISCP) has been utilised in the UK for many years to facilitate the education and assessment of trainees. It was adopted by the Irish Trauma and Orthopaedics (T&O) training programme in July 2015. This study sought to evaluate the use satisfaction with ISCP in the Irish context.

Methods A total of 58 T&O trainers and trainees undertook a paper-based survey during national training days in March and April 2017.

Results Eighty-nine percent of trainees responded to the survey along with 85% of trainers. Seventy-nine percent of respondents had been using ISCP for over a year. Most aspects of ISPC were rated as average, with the induction process, online multi-source feedback (MSF) and overall user friendliness rating poorly amongst respondents. Seventeen percent felt that ISCP had a positive impact on training, while 66% felt that it did not adversely affect their training opportunities. Forty-three percent reported a negative impact on the trainer-trainee relationship with adoption of ISCP and only 24% felt that the educational feedback was improved with the new system. Forty-two percent agreed that ISCP created a more structured and supervised framework to the training scheme.

Conclusions Our survey demonstrated significant concerns and reservations amongst the Irish users of ISCP. The demonstrable level of trainee dissatisfaction with ISCP may represent a frustration that key problems such as the regulated training content of jobs remains unaddressed while ISCP does little to improve meaningful formative feedback.

Keywords ISCP · Orthopaedic surgery · Surgical training

Introduction

Surgical training has traditionally been delivered by an apprenticeship model followed by a formal exam. A Certificate of Completion of Specialist Training (CCST) was awarded following a set number of years spent in training and obtaining a pass in the Intercollegiate Fellowship of the Royal Colleges of Surgeons (FRCS). Surgical training has undergone significant reform in recent years aimed at improving training while also shortening the overall training time [1]. The European Working Time Directive (EWTD) further impacts on the

shortened training pathway of trainees. It has been shown that trainees on a 5-year training programme will only accrue approximately 11,250 hours of the 20,000–30,000 hours traditionally needed to complete surgical training [2, 3]. The reduction in operative experience caused by the limitations imposed by the EWTD [4, 5] means that operative competency can no longer be presumed based on experience alone [6]. In the context of reduced experience, regular feedback has been shown to improve learning and thus there has been an adoption of workplace-based assessments (WBA) to facilitate this.

The Intercollegiate Surgical Curriculum Programme (ISCP; <http://www.iscp.ac.uk>) has been developed to aid in the delivery and the assessment of surgical training. It is a competence-based curriculum, which is speciality specific and comprises of an internet-based portfolio, including an online WBAs tool. The ISCP became mandatory for all British ‘Speciality Registrar’ trainees since August 2007. It was adopted by the Irish Trauma and Orthopaedic (T&O)

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training programme in July 2015. Its introduction in Britain was met by widespread dissatisfaction amongst users, and in particular with the work-based assessments [7].

This study is a comprehensive assessment of the views of Irish Trauma and Orthopaedic trainees and trainers to assess their satisfaction with the newly introduced ISCP tool.

Methods

A paper-based questionnaire was constructed based on one previously validated in a study by Pereira et al. to assess British surgeons' satisfaction with ISCP [7, 8]. Questions regarding the use of the ISCP logbook and registration fee were not included as these were not relevant to the Irish context. Likert items in 4 and 5 ordered response levels were used where appropriate (Table 1) [9]. The questionnaire was circulated amongst T&O trainees and trainers at Core Curriculum days (national training days) over a 2-month period March–

April 2017. ST8 trainees ($n = 6$) were excluded from the study as these were not enrolled with ISCP and had no working knowledge of the system. Data was collated and analysed using Excel (Microsoft Corporation, Redmond Washington, USA).

Results

A total of 58 surgeons and surgeons in training responded to the survey. Response rates amongst trainees were 89% (41/46 ST3–ST7 trainees). Response rate amongst consultant trainers to our survey was 85% (17/20 Trainers). All respondents were registered and 79% of respondents had been registered with ISCP for at least a year. Figure 1 illustrates the demographics of respondents by grade and Fig. 2 by time registered with ISCP.

The majority of responders rated ISCP performance in the different areas as average; however, the induction process,

Table 1 Summary of questions and available response

Question	Possible response
1. How long have you been registered with the ISCP?	< 6 months, 6–12 months, > 12 months, not registered
2. Is ISCP a compulsory part of your training?	Yes, no, N/A (trainer)
3. How would you rate the performance of ISCP in the following? (a) Registration process (b) Induction process (c) Online assessments (d) Online multi-source feedback (MSF) (e) Recording meetings and objectives (f) Helpdesk (g) Overall user friendliness	Very poor, poor, average, good, very good
4. Have you had to carry out assessments on paper as a result of the practical difficulty associated with the online process?	Yes, no
5. Has ISCP impacted adversely upon other training opportunities because of the time taken in completing the required forms?	No—never, only rarely, sometimes, frequently
6. What kind of impact has ISCP had upon training?	Very positive, positive, neutral, negative, very negative
7. What kind of impact has ISCP had on the trainer-trainee relationship?	Very positive, positive, neutral, negative, very negative
8. What kind of impact has ISCP had on the educational feedback from the trainer to the trainee?	Very positive, positive, neutral, negative, very negative
9. Do you think the online portfolio of evidence is a benefit to the trainee when compared to the previous paper based format?	Yes, no
10. The ISCP has helped create a more structured and supervised framework to training?	Strongly agree, agree, neutral, disagree, strongly disagree
11. Please leave further comments here about your personal experiences with ISCP.	Free text
12. What do you think about the following factors and training? (a) Hours at work (b) Regulated training content of the job (c) Competency-based assessments (mini-CEX, CBD, DOPS, PBA) (d) Departmental teaching (e) Access to study leave (f) Core Curriculum days (g) Training by consultants (h) The ARCP/RITA annual assessment process	Currently not an issue, small issue, moderate issue, huge issue

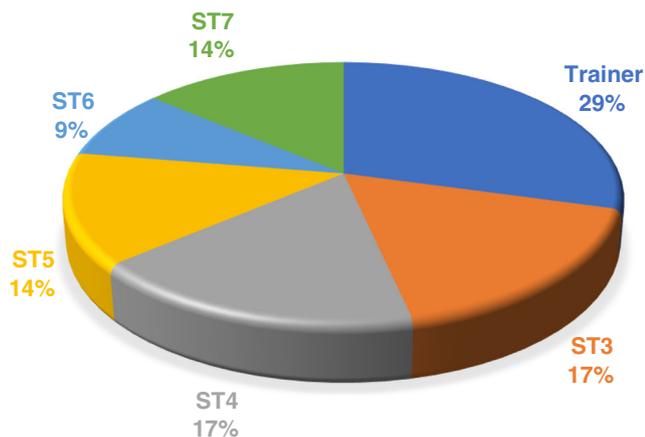


Fig. 1 Demographics of respondents by grade

online multi-source feedback (MSF), and overall user friendliness rated poorly amongst users. Figure 3 illustrates respondents’ rating of ISCP performance with regard to (a) registration process, (b) induction process, (c) online assessments, (d) online MSF, (e) recording meetings and objectives, (f) helpdesk, (g) overall user friendliness. Ten (17%) individuals had to carry out assessments on paper because of the practical difficulty associated with ISCP website.

With regard to the overall impact of ISCP on training, 48% considered it to be neutral with only 17% felt it had a positive impact (Fig. 4). Training opportunities were not adversely affected by the new system with 66% stating that an adverse effect was rarely or never encountered (Fig. 5).

Twenty-six respondents (43%) reported a negative or very negative impact on the trainer-trainee relationship as a direct result of adoption of the ISCP (Fig. 6). The quality of educational feedback was maintained, but only 14 respondents (24%) felt that the ISCP had a positive influence on the educational feedback given to trainees (Fig. 7).

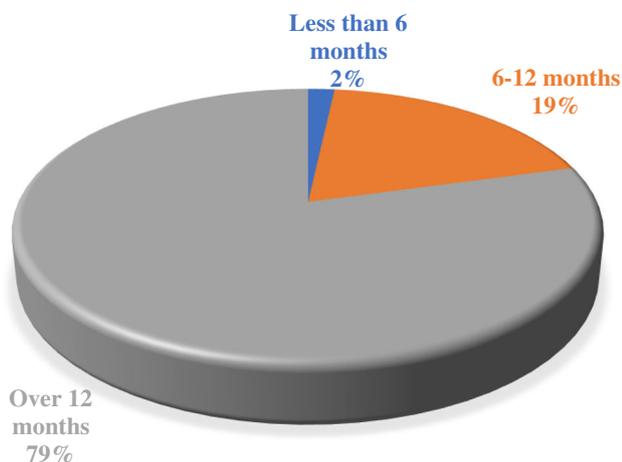


Fig. 2 Demographics of respondents by time registered with ISCP

Twenty-four respondents (42%) reported that they agreed with the statement that the ISCP helped create a more structured and supervised framework to training and 40 respondents (70%) felt that the provision of an online portfolio of evidence is a benefit to the trainee when compared to the previous paper-based format.

Respondents identified that the major factors affecting T&O training in Ireland were the hours of work, regulating the training content of the job and the online WBAs administered through the ISCP (Fig. 8).

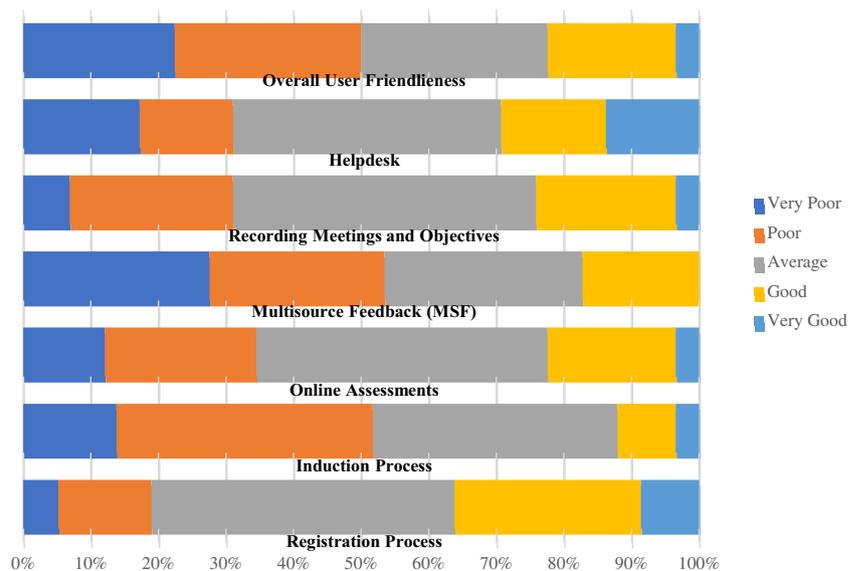
Discussion

Previous studies have shown that the early British experience of the ISCP and transition to a competency-based curriculum was one fraught with difficulty, resulting in extensive user dissatisfaction with the new process [7]. Regardless of these findings, the transition to a competence-based format is a necessity in the changing training environment. Reduction of working hours in line with the EWTD, in addition to greater public scrutiny, required a transition to maintain high levels of training and patient safety. Our findings highlight some of the difficulties Irish users are encountering during this transition period which seem to echo those experienced by our British counterparts in the past.

Work-based assessments are an integral part of the ISCP but remain an issue for our users. WBAs are designed to integrate teaching, learning, assessment and feedback, and to assess skills and behaviours rather than just knowledge [10]. Their primary purpose is to facilitate learning amongst the trainees by providing feedback in a structured format and is available in many formats such as multi-source feedback (MSF), Case-Based Discussion (CBD), mini-Clinical Evaluation Exercise (mini-CEX), Direct Observation of Procedural Skills in Surgery (S-DOPS) and Procedure-Based Assessment (PBA). Regardless of their widespread use, their educational value remains uncertain. These tools provide feedback, which has been shown to lead to learning and improve performance [11]; however, there is a paucity of literature proving that this is the case in medical education. Under strict exam conditions, the mini-CEX tool has been shown to be a reliable tool [12] but a systematic review found that though there are numerous subjective positive reports on their educational merit, there is no evidence that they lead to an improvement in performance [13].

Work-based assessments are intended to be used as an assessment *for* learning, to aid training with regular, structured, objective feedback. They are intended to be started early and continued regularly throughout a training job and demonstrate progressive improvement in knowledge and surgical competence. Their misuse, as described by

Fig. 3 Respondents' rating of ISCP performance



Beard, leads to the negating of their potential benefit and the frustration we observed in our survey. When used improperly as assessment of learning, trainees undertake the minimum required by their relevant training programme. They become little more than a box ticking exercise, with trainees deferring their use until they gain enough experience to be confident of a good mark [10]. Our respondents described in the free comments section the practice of retrospective batch filling of WBAs approaching the end of a rotation. This practice leads to demotivation amongst trainees and trainers alike, with a reduction in the education value of the process creates a culture of the minimum acceptable standard while placing an administrative burden on users [14].

The negative impact of competency-based training on the trainee-trainer relationship is a worrisome finding in our study. Traditional surgical training was based on an apprenticeship model, with a strong relationship between trainer and trainee

being a key factor. This remains a desirable trait, even amidst the changing training environment. Trainees commented that they have an impression of ‘chasing’ and ‘harassing’ trainers to sign off the required documentation. The reasons for this are no doubt multifactorial with trainees themselves responsible for creating an artificial time constraint by deferring the assessments until they have gained enough experience to achieve a higher mark. The joint committee on surgical training (JCST) requires 40 WBAs per calendar year, which equates to less than one a week which is eminently achievable if assessments are applied correctly. Other factors such as trainers refusing to complete forms [15] were not reported amongst our respondents.

The Association of Surgeons in Training (ASiT) has highlighted that during the change to competency-based training, British ‘trainers were not sufficiently well informed concerning the completion of online assessments and as a result there is significant variability in the

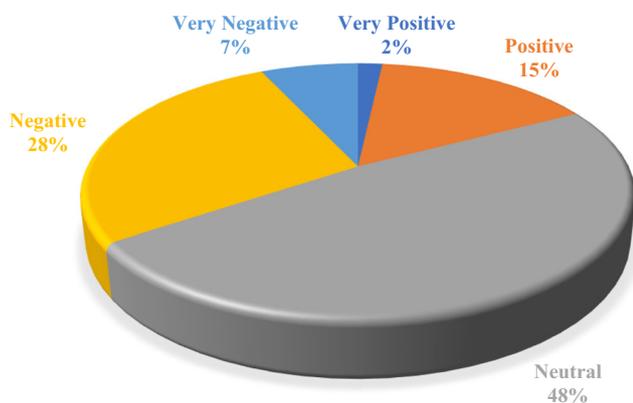


Fig. 4 The impact of ISCP on training

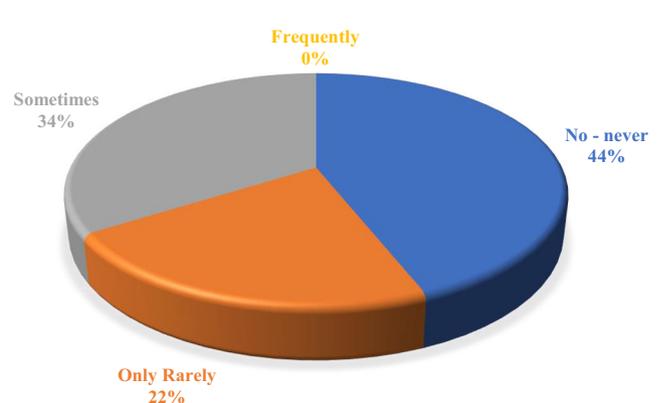


Fig. 5 The adverse impact of ISCP on training opportunities



Fig. 6 The impact of ISCP on the trainer-trainee relationship

quality and validity of the information being obtained’ [7] and it is reasonable to assume that the same is occurring in Ireland with the expeditious cultural shift in training. Respondents also highlighted the ISCP can be tedious and time consuming, which can be difficult to integrate into an already busy working day. Perhaps the solution would be to award the consultants who participate in training with protected, rewarded training time to accommodate the more structured approach to training [16]. Perhaps the biggest challenge to the Irish trainer was the recent upgrade to ISCP version 10, which occurred less than 12 months after most individuals first signed up. Trainers reported frustration with the user friendliness and functionality of the new version after engaging over the previous year to become accustomed with Version 9. This likely lead to increased frustration with the process and may account for some of the negative perceptions amongst Irish users, but is likely to be a short-lived influence as users become more familiar with the current version.

The multi-source feedback (MSF) tool remains an obstacle to full embracement of ISCP in Ireland. Despite its

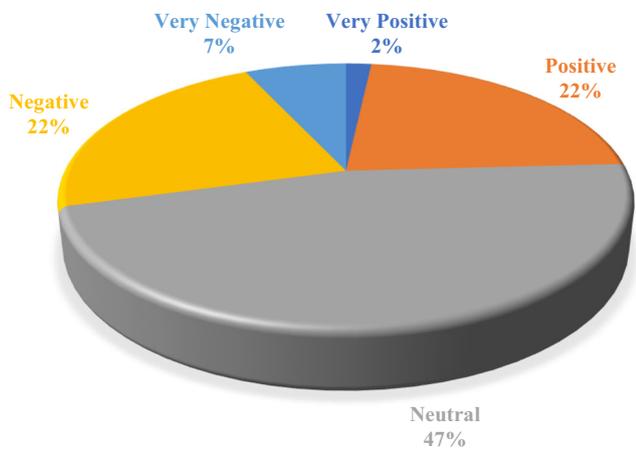


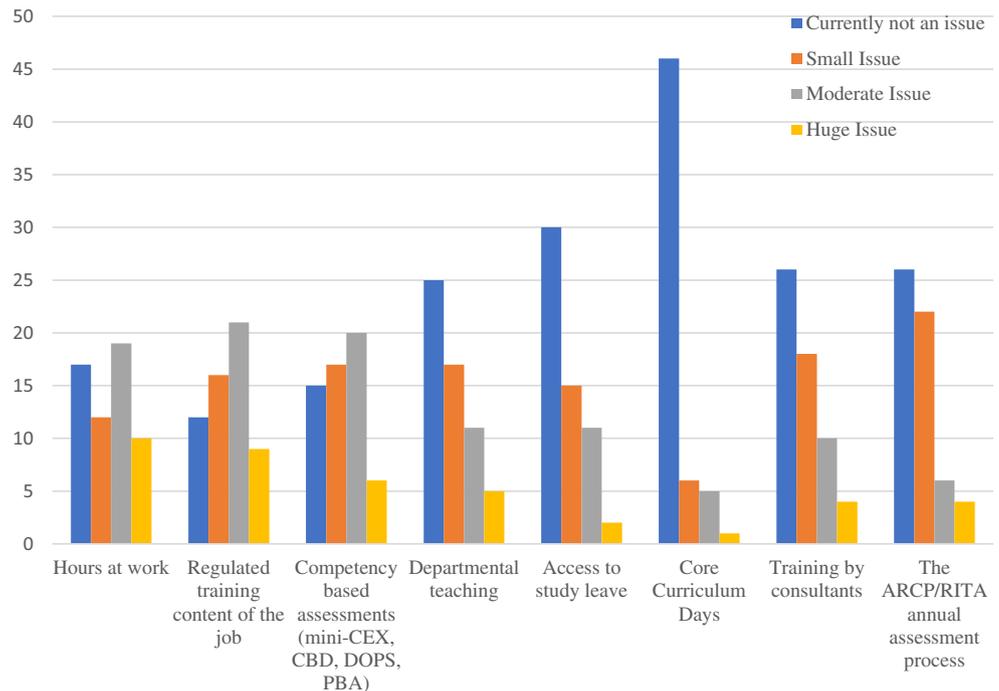
Fig. 7 The impact of ISCP on educational feedback

improvement from previous versions, it remains flawed in its awkwardness to register new assessors. In a hospital culture where peer assessment tools are in their infancy, it relies on over-stretched trainees to drive a cultural shift in a busy workplace with a tool that is discouraging for non-medics to become involved with. There are potential benefits in performance with MSF but can be variable depending on the individual and the context of the feedback given [13]. As peer assessments become more widespread in Irish hospitals, users’ interactions with the ISCP MSF section may improve as they did in the British context in the 3 years between the surveys conducted by Pereira et al [7, 8] which would improve the dissatisfaction amongst Irish surgeons, though unlikely to abolish it completely in keeping with the British experience.

Perhaps the bigger issue for Irish trainees is not the adoption of ISCP but rather the continued issues surrounding working hours and regulating the training content in surgical training jobs. The ISCP produces a paper trail for training bodies with regard the assessment of trainees during their training. It does not reflect the satisfaction of trainees or indeed the quality of training that each receives. The issue regarding reduction of working hours in the Irish context remains problematic due to low staffing levels compared to our British counterparts and though EWTD compliance did improve quality of life amongst trainees, it had a detrimental effect on quality of training in local studies [17, 18]. Training content and trainers approach to training is not structured and the dissatisfaction amongst trainees reflects this. This should be addressed to monitor the exposure of trainees to key training content in a supervised fashion in theatre and outpatient clinic. There may be even a role to begin to assess trainee satisfaction with trainers, to identify the standout trainers involved in the programme and make use of this valuable resource for all trainees [19].

Conclusion

Irish T&O surgeons and surgeons in training have significant concerns and reservations following the adoption of ISCP after the first 20 months of use. A significant cause for dissatisfaction amongst trainees is the reported misuse of the ISCP as a summative tool of training rather than a formative tool of learning. Irish surgical training is undergoing a cultural shift and the process remains in evolution. Reassuringly, however, users already identify that it provides a more structured and supervised framework for surgical training, and that the adoption of an online repository is desirable. The initial dissatisfaction rates demonstrated in Britain during the transition has been repeated in Ireland despite the lessons learned in Britain and the improved functionality of the website. This likely represents an initial resistance and frustration with the seismic

Fig. 8 Factors affecting trainee in Ireland

culture shift of an established training programme. Perhaps the focus of the training body should be to improve the training content of jobs and monitor trainee experience rather than increasing the bureaucratic burden upon trainers and trainees alike.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Informed consent was obtained from all individual participants included in the study.

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